Addressable

Electroline Data Repeater Model DR02

Description

The Electroline Data Repeater injects a reconstructed Electroline FSK data carrier where necessary. It receives a data carrier from the Electroline Control Unit and remodulates the incoming carrier in the format and frequency that is required for specific applications.

The Data Repeater can be used to:

- **Ensure compatibility between dual and single FSK cable systems.** It is the link between existing dual FSK carrier equipment and Electroline's new generation of frequency agile, single FSK equipment. The Data Repeater receives the dual FSK carrier from the Electroline Control Unit and retransmits the data on a single FSK carrier. Single FSK carrier equipment can then be deployed without making changes to the Control Unit or to any software. (diagram 1)
- **Introduce a second data carrier.** The Data Repeater can be used in conjunction with an Electroline Control Unit to control two sets of addressable devices that respond to different Electroline data carrier frequencies. (diagram 2)
- **Reconstruct a data carrier from the cable network.** Instead of a filter, the Data Repeater can be used to isolate the Electroline data carrier from the CATV signals, without signal degradation and inject it at a secondary headend or hub site. (diagram 3)

Ensure Compatibility between Dual and Single FSK Systems

The Electroline Advantage

By bridging the gap between Electroline's dual and single FSK carrier equipment, the Data Repeater plays an important role in the deployment of enhanced versions of the components within the Electroline Addressable System and the CLEARPath™ System.

Electroline designs and manufactures the Data Repeater at its North American ISO 9001 certified facility.

Features

- Converts dual FSK to single FSK enabling compatibility between dual and single FSK types of addressable equipment
- Creates a copy of a data carrier at another frequency
- Reconstructs a data carrier for injection into a different part of a cable network
- Monitors quality of input and output carriers
- Rebuilds incoming signals to eliminate jitter
- Minimal relay delay (15 ms)
- Only one rack-mount space required

Specifications

Frequency Ranges for Single FSK Data Carrier Products:
Single FSK modulators and demodulators are available in three frequency ranges (agile on each):

Option	Frequency Range (MHz)
Low-range	46-78
Mid-range	72-120
High-range	108-162

Frequencies for Dual FSK Data Carrier Products:
Dual FSK modulators and demodulators are available in the following frequencies (MHz):
46. 50.8. 51. 53. 73. 73.3. 74.3. 76. 86.2. 87. 90. 101**. 102.4. 112. 118

Physical Specifications:

Dimensions: 483 mm x 254 mm x 44 mm (19" x 10" x 1.75")
Weight: 5 kg (11 lb)

Notes: *Specifications are subject to change without notice.
** Demodulator only.

Electroline Data Repeater Applications

Diagram 1: One network with dual and single FSK equipment
The Data Repeater used in this application has a dual FSK demodulator and a single FSK modulator. The dual FSK demodulator is required in order to receive the dual FSK carrier from the Control Unit, and the single FSK modulator is necessary for transmitting the single FSK carrier. The single FSK carrier is injected between the dual FSK carriers so that no additional bandwidth is used.

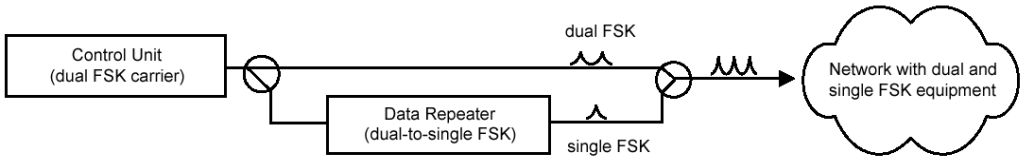


Diagram 2: Network(s) with two different frequencies
The Data Repeater and the Control Unit operate with the same type of carrier, i.e.dual FSK or single FSK, but they modulate it on a different frequency. The Data Repeater receives the carrier from the Control Unit and shifts it to a new frequency. The Control Unit will then be able to control all the addressable devices in the field, no matter which of the two frequencies each device demodulates.

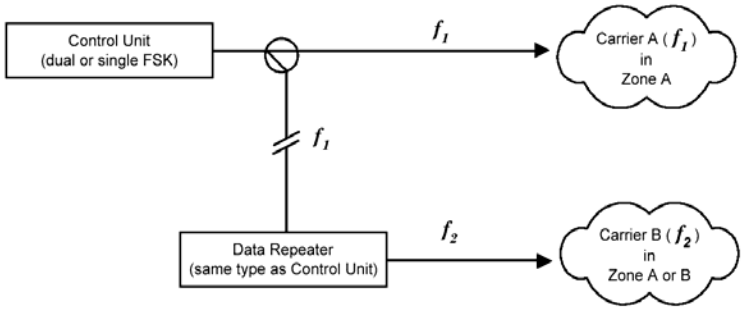
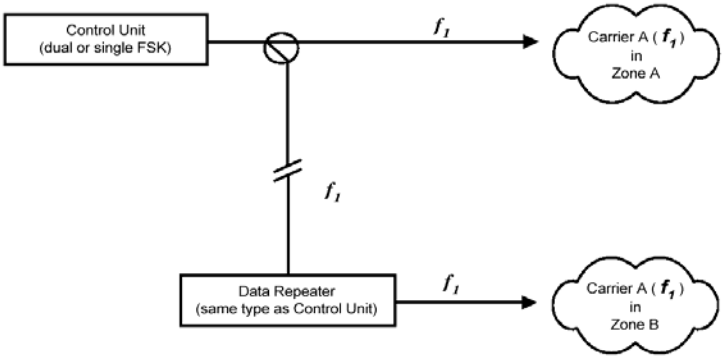


Diagram 3: Headend and remote site with same frequency
Both the Data Repeater and the Control Unit operate with the same type of carrier, i.e. either dual FSK or single FSK, and they modulate it on the same frequency. The reconstructed carrier is injected at a secondary headend or hub.



For more information on our products, please visit: www.electroline.com or call: 800-461-3344